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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/056,905

11/13/2001

Jurgen Bussert

A34729 (071308.0250)

2357

31625

7590

10/18/2006

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EXAMINER

ARANI, TAGHI T

ART UNIT

PAPER NUMBER

2131

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/056,905	Applicant(s) BUSSERT, JURGEN	
	Examiner Taghi T. Arani	Art Unit 2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Taghi T. Arani
Primary Examiner
Aug 21 2006
10/14/06

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DETAILED ACTION

1. The text of those sections of Title 35 U.S. Code not included in this section can be found in the prior office action.
2. The prior office actions are incorporated herein by reference. In particular, the observations with respect to claim language, and response to previously presented arguments.
3. Claims 1, 5, 6, 8, 11, 12, 13 and 16 have been amended.
4. Claims 1-16 are pending.

Response to Arguments

5. Applicant's amendment filed 08/010/2006 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 5,978,476 to Redman et al. (hereinafter "Redman") and further in view of US Patent 6,904, 527 to Parlour et al. (hereinafter "Parlour").

As per claims 1 and 8, Redman teaches a method and a system for transferring control programs comprising:

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encrypting a control program code in a first development system (Figure 2 and associated text, col. 5, lines 10-19, i.e. generation of encrypted design file, see also col. 10, lines 54-59, the vendor encrypts his design file (control program) using a design file encryption system), transferring the encrypted control program code from the first development system to a second development system (col. 4, lines 41-45, the vendor creates the encrypted design file 103 makes it freely available via download on the World Wide Web), and decrypting the encrypted control program code in the second development system (Figure 4 and associated text, col. 6, line 65 67, col. 7, lines 27-29, decryptor 403 within the permission verification system 109 decrypts the authorization code 115 and decodes the encrypted design file using the design decryption key), wherein the decryption of the encrypted control program code is carried out following editing of the encrypted control program code in the second development system (col. 7, line 55 through col. 8, line 17, design processor 413 performs steps P, Q, R, S, T and U (i.e. editing of the encrypted design file) prior to decrypting the encrypted design file).

Redman does not teach (as argued by the Applicant, page 7 of the REMARK) “encrypting a part of the control program code” and decrypting the partially encrypted control program.

However, in an analogous art, Parlour teaches encrypting a part of the control program (col. 4, lines 34-44, i.e. encrypting the IP module portion of the bitstream) and decrypting the partially encrypted control program code (col. 4, lines 45-52, i.e. “the target PLD uses the key number to retrieve the proper IP module key from the non-volatile memory, and then uses the retrieved IP module key to decrypt the IP module portion. When the IP module portion has been

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decrypted, the resulting configuration data bitstream is used to configure the target PLD so as to realize the user-specific circuit.”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method and system of Redman to that of Parlour for encryption a part of a control program code and decrypting the partially encrypted control program to prevent replicating the user’s specific design by unscrupulous second user ‘s copied bitstream to configure another product (see Parlour, col. 2, lines 17-26).

As per claims 2 and 9, Redman as modified teaches the method and the system according to claims 1 and 8 respectively, further comprising exporting the encrypted control program code in a format that can be read by standard Internet clients via the first development system, and importing a data in the format that can be read by standard Internet clients via the second development system (Redman, col. 4, lines 41-45, the encrypted design file can be freely available via download on the World Wide Web (i.e. Standard Internet clients), Kolouch, col. 5, lines 13-60).

As per claims 3 and 10, Redman teaches the method and the system according to claims 1 and 8 respectively, wherein the encryption and decryption of the data is carried out by means of asymmetrical keys (col. 5, lines 32-33).

As per claim 4, Redman teaches the method according to claim 1, wherein the encryption of the control program code is carried out following editing of the control program code in the first development system (Figure 2, file header assembler 209 (editor), col. 5, line 63 through col. 6, line 23, accepts information and generate tags A and B to be placed in a file header into the encrypted design file, prior to encrypting the design file (control program)).

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As per claim 5, Redman teaches the method according to claim 1, wherein a head part of the control program remains unencrypted (col. 5, line 63-66, i.e. the file header (unencrypted) is appended to encrypted design file (col. 6, lines 27-28)).

As per claims 6, 12, 13 and 16, Redman does not teach but Parlour teaches wherein the control program comprises a plurality of program modules and wherein different modules are encrypted differently (or with different encryption level) (Parlour col. 3, lines 40-63, where public/private keys are specific to unique device identifier (UDI).

The Examiner provides the same rationale as provided in claims 1 and 8 above for combination of Redman -Parlour.

As per claims 7, Redman teaches a method and for the configuration, project engineering and commissioning of a control system and a drive comprising transferring a control program according to claim 1, comprising compiling the decrypted control program, and processing the compiled control program by means of a microprocessor (Figure 5 and associated text, compiler 503, col. 8, line 64 through col. 9, line 3. performs requested actions for which the user has permission.).

As per claim 11, once modified, Redman teaches the system according to claim 8, wherein the first development device further comprises a second editor for editing the control program code (col. 5, line 63 through col. 6, line 23, i.e. a file header assembler (editor)) and a communication device (col. 4, lines 44-46, Redman discloses that encrypted design file 103 is freely available to the public via download on the World Wide Web (i.e. a communication device)) and a postprocessor (Figure 2 and associated text, i.e. ENCRYPTOR 203 encrypts design files after assembler (editor) accepts information and generate tags A and B to be placed

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in a file header into the encrypted design file) for partially encrypting the control program code connected between said second editor and communication device.

As per claim 14, Redman teaches the system according to claim 8 utilized in an arrangement for the configuration, project engineering and commissioning of a control system and/or a drive (col. 1, lines 18-32, Redman discloses the implementation of his invention in the area of Electronic Logic Design where the designers of logic devices program programmable logical devices).

As per claim 15, Redman teaches a method and a system according to claims 6 and 13 respectively, wherein a head part of the control program remains unencrypted (col. 5, line 63-66, i.e. the file header (unencrypted) is appended to encrypted design file (col. 6, lines 27-28)).

Action is Final

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Conclusion

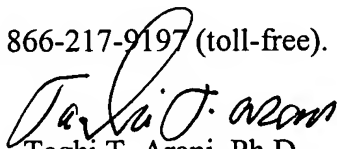
7. Prior arts made of record, not relied upon:

Us 7,85,825 to Colvin.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taghi T. Arani whose telephone number is (571) 272-3787. The examiner can normally be reached on 8:00-5:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Taghi T. Arani, Ph.D.
Primary Examiner
Art Unit 2131
10/14/2006